



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

April 11, 2014

Jeff Dekker
Vice President of Finance
GlobeImmune, Inc.
1450 Infinite Drive
Louisville, CO 80027

**Re: GlobeImmune, Inc.
Registration Statement on Form S-1
Filed March 17, 2014
File No. 333-194606**

Dear Mr. Dekker:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

General

1. Please confirm that the graphics included in your registration statement are the only graphic, visual, or photographic information you will use in your prospectus. If those are not the only graphics, please provide any additional graphics prior to their use for our review.
2. Please submit all exhibits as soon as practicable. We may have further comments upon examination of these exhibits.
3. We note that you have filed a request for confidential treat of portions of certain of your exhibits. Please note that our comments on your request for confidential treatment will be provided under separate cover.

4. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.

Inside Front Cover Page

5. Please delete the pipeline table preceding the Table of Contents. We note that the pipeline table already appears in proper context in your Prospectus Summary.
6. Please delete the graphic and related discussion of the function of Tarmogens preceding the Table of Contents. We note that you have included a series of illustrations explaining the Tarmogen platform beginning on pages 97, which is the more appropriate location for this discussion given the technical nature of the information and the fact that the concept is still being investigated through clinical trials.

Prospectus Summary

Overview, page 1

7. We note your statement in the second bullet point that you “have treated more than 500 patients and healthy volunteers.” Please revise this statement here and elsewhere in your registration statement to clarify that you have administered your Tarmogen product candidates to these patients and volunteers. In that regard, we note that the FDA has not approved any of your product candidates as a treatment for any disease or indication.

Infectious Disease Programs, page 2

Oncology Programs, page 5

8. In the paragraph beginning at the bottom of page 2 regarding the results of the study of treatment naïve patients who were administered GI-5005, and in the discussion on the top of page 5 of the results of the MSKCC study of GI-4000 for NSCLC patients, please state, if true, that these results were not statistically significant.

Risk Factors

“The requirements of being a public company may strain our resources...” page 46

9. Please separate this risk factor into two standalone risk factors with one addressing the costs and risks associated with being a public company and a second describing the risks associated with being an emerging growth company with reduced disclosure obligations.

Use of Proceeds, page 50

10. Please revise this section to add a bullet indicating, if true, that you will use proceeds from this offering to fund the completion of the ongoing clinical trial for GI-6207 and the three ongoing clinical trials for GI-4000 related to resected pancreatic cancer, NSCLC, and colorectal cancer, and specifying the anticipated amounts required to complete those trials.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Research and Development Expense, page 64

11. Please refer to the six bullets that describe what research and development expense consists of, and provide us, preferably in table format, for 2011, 2012 and 2013, separately by year, the amount incurred for each bullet. Where possible, identify amounts within each bullet category with the project or agreement to which they relate.

Business
Overview, page 87

12. Please revise your disclosure to describe the INDs submitted for GS-4774 and GI-6207 by indication and disclose when these INDs were filed and by whom. Additionally, if you or someone else has not filed an IND for each of GS-4774 and GI-6207 or has filed INDs but not for the indications you are currently investigating, please explain the basis of your apparent belief that an IND filing or an amended IND filing was not required, respectively.

Oncology Programs, page 89

13. Please expand your discussion of the BDX-001 companion diagnostic test to disclose that you do not own the rights to BDX-001 and may not be able to obtain the rights to use BDX-001. In addition, please disclose who owns the test and describe what steps you have taken to obtain rights to use the test.
14. Please expand your disclosure to describe the materials terms of your arrangements governing the studies at MSKCC and the Lombardi Cancer Center and file a copy of any agreement as an exhibit to your registration statement pursuant to Item 601(b)(10) of Regulation S-K or provide your legal analysis as to why such disclosure and/or such filing is not required.

Intellectual Property, page 103

15. Please expand your discussion of the six Tarmogen technology platform patent families expiring from 2021 through 2030 and the patent families related specifically to GI-4000,

GI-4774, GI-6207 and GI-6301 to indicate, in each case, the type(s) of patent protection, such as composition of matter, use, or process.

Executive and Directors Compensation
Employment Agreements, page 121

16. Please file a copy of the employment agreements with Messrs. Dekker and Christofferson as exhibits to your registration statement.

Principal Stockholders, page 140

17. Please update your beneficial ownership table as of the most recent practicable date, as required by Item 403 of Regulation S-K.

Notes to Financial Statements
(8) Deferred Revenue, F-26

18. Please disclose separately, by agreement, the costs incurred for each period presented under your agreements with Celgene and Gilead, and where the costs are classified within in your statements of operation. Refer to ASC 730-20-50-1b.

(7) Redeemable, Convertible Preferred Stock and Stockholders' Equity
(h) Warrants, F-25

19. Please tell us why, on page 8 under the "Offering," the number of common shares outstanding after the offering excludes common stock issuable upon:
- the exercise of outstanding warrants to purchase preferred stock, which will convert into warrants to purchase common stock upon completion of this offering; and
 - the exercise of outstanding warrants to purchase capital stock of the Company issued in January and February 2014, which will convert into warrants to purchase common stock upon completion of this offering.

This presentation is inconsistent with your pro forma presentation on page 11 under "Summary Financial Data" in which you show the warrants converting upon the completion of the offering.

20. Please disclose herein the nature and terms of any automatic conversion of warrants.
21. Please provide us your analysis under ASC 480 explaining the basis for your accounting and classification of the warrants.
22. Please tell us why you believe the Black-Scholes option pricing model is an appropriate model for arriving at the fair value of the warrants.

Jeff Dekker
GlobeImmune, Inc.
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Page 5

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Jim Peklenk at (202) 551-3661 or Joel Parker at (202) 551-3651 if you have questions regarding comments on the financial statements and related matters. Please contact Amy Reischauer at (202) 551-3793 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler
Assistant Director

cc: Brent D. Fassett
Cooley LLP
380 Interlocken Crescent, Suite 900
Broomfield, CO 80021